

RSC 8: REVIEWED OR REJECTED? HOW TO REVISE A MANUSCRIPT AFTER PEER REVIEW

Peer review is an integral part of publishing. While we get to nominate reviewers – or even exclude reviewers – the editor decides who a particular manuscript gets sent to and if the manuscript suits the journal's scope, format and quality. A number of experts in the field chosen by the editor will read and critique your work. Such a review is a service, usually unpaid, and based on the quality of the review and the comments of several reviewers the work may receive the verdicts of usually either minor revisions, major revisions or rejection (sometimes with the invitation to resubmit). Now, assuming your work was sent for review, you will need to revise, no matter what the decision was. The more negative the outcome, the more unfairly we tend to feel treated, so first of all calm down, put the work on the side and pick it up when you are able to respond (rather than react). There are a number of considerations to make and these are tough as we tend to be biased, we may overestimate the quality of our work or we may know the flaws (and most work has some flaws). In other words, we may be overly confident (and thus blind to some of these flaws) or we may be suffering from imposter syndrome (and this puts down our work unduly). We may oversell or undersell. Or we may be completely cynical and think this is all one big lottery and the system is totally dysfunctional. To really evaluate the comments, one needs to have a calm mind and believe in the system - it works, not perfectly, but at least to the extent that no one has been able to suggest a better way of doing things. Experience helps, so have a talk with your supervisor, senior author or mentor, who will be able to judge what is required to get published. Sometimes circumstances are such that one can deviate from the rules and re-negotiate an outcome, but exceptions are – as the name suggests - rare. First of all, revise! Some explanations first.

- ◆ **NOMINATING REVIEWERS:** The choice of the reviewers that are suggested in the submission is a great opportunity to put forward experts that one would like to have a look at the work. The nomination does not mean that the editor will choose these suggested reviewers. In social media, this practice has been labelled as a fraud, and clearly this has been abused. Some authors nominate themselves with a different name and email, others put famous names with false emails or friends with no expertise in the field. The fraud here is not the system, but the authors, who obviously think so little about their own work that they need to cheat. How does one nominate a good reviewer? Criteria one is that it is not an enemy, it should be someone neutral or a friend. No one chooses a reference that has a poor opinion about oneself! If friend, one should not expect favours. A true friend says what needs saying and picks up flaws in the work with even more care. Editors know that most people nominate friends and of course, will look for experts in the field independently. For me, the best reviewer is the most esteemed expert on the topic of the manuscript, thorough, tough and fair. If that person agrees to review my work and gives inevitably tough comments, then this is a huge compliment. Once this trial is mastered, only confidence and pride remain. This requires courage. One can also exclude reviewers, but in my opinion, this is not necessarily helpful, as it assumes that someone else will behave unfairly or unreasonably tough.
- ◆ **EDITOR RESPONSIBILITIES:** Editors handle hundreds of manuscripts in a year with the difficult task to screen manuscripts, identify suitable reviewers, evaluate the quality of reviews, evaluate the response to reviewer comments and if need be, send for several more rounds of review. Some editors need to request 10+ reviewers to find two or three willing to deliver on the task and then remind relentlessly so the task is completed. We are all overwhelmed by the many requests and even if willing, simply cannot deliver. Editors need to communicate, albeit through somewhat automated systems, with reviewers, authors and publishing managers and deal with conflicts and complaints. Given the very large loads, some mistakes and oversights occur. On occasion I have been sent my own manuscript for review (obviously I don't accept!), spam reviews (reviewers who send the same comments to all manuscripts) slip through or the request by reviewers to have their own work cited are not picked up (it would be appropriate for the editor to add a note that such requests can be ignored). Let's be thankful that editors serve our community with this tremendous effort (rather than chasing their own h-index) and support them with integrity and quality. If there are concerns, express these directly, our life does not depend on a single editor if he/she takes our (ideally constructive) feedback badly. I have had fierce fights with editors on occasion. Sometimes I hear from colleagues that I am not alone and eventually issues are corrected, sometimes I decide to not send further work to a particular journal and often there is a conversation of mutual respect and we are able to resolve the matter.

- ◆ **REJECTION WITHOUT REVIEW:** If a manuscript did not make it to review, there is nothing to revise or respond to. Reflect on why a particular journal was agreed on and how the fit was established. Note that the choice should not be the journal impact factor per se, but the match between your particular work and the interest of the journal. This may not always be obvious, as editors may make their own decisions as to publication strategy and this is not always communicated. Some journals may have all-male editorial boards and then it appears odd that papers with all female authors get rejected without review, all this happens, but if such bias is the reason, then it is pretty easy to resubmit elsewhere.
- ◆ **REJECTION:** This hurts, of course. Now the temptation is to feel unfairly treated and simply submit elsewhere. As a reviewer I have, on several occasions, been sent manuscripts that I rejected with long and constructive feedback, by another journal without changes. This is very irritating as the effort that I put in as a reviewer was wasted. While this makes for a quick review (I usually just write to the editor and send the review that I had sent to the previous author), this is reputation-damaging. Not for the reviewer or the editor, but the authors. What we do at IAMT is write a full response, make the necessary changes, and then submit this to a new journal. When we submit, we attach the cover letter with a note that this was rejected by another journal (name) and that the responses to these reviewers are attached to this new submission (if need be as part of the cover letter). Most editors will appreciate this, as it is honest, transparent and it honours the effort of previous reviewers. On rare occasions the editors (usually inexperienced editors) do not want a 'reject', then we go elsewhere. Sometimes, the journals are related, and the new editor may be able to access the original reviews and even use them, which will fast-track the next review. This is the idea behind transferring to another journal.
- ◆ **REJECTION WITH INVITATION TO RESUBMIT:** This category is, as far as I know, a major revision with an uncertain outcome, but it is clear that revisions will take a considerable amount of time. The motivation to reject with invitation to submit is probably motivated by publication statistics. It looks better for a journal to have a high rejection rate and a faster turnaround. Beyond that it is a major revision, but all the effort of submission is required again and of course, one can decide at this point to start afresh with a new journal. In my experience resubmitting it again is a good path, provided the comments can be addressed. Sometimes (and this ought to be an exception) I negotiate with an editor of a rejected manuscript to be allowed to resubmit as a new manuscript when careful consideration leads to my assessment that the comments can be addressed. Asking nicely can yield success.
- ◆ **MAJOR REVISION:** This is the most common response, which means you get the opportunity to revise, albeit with an uncertain outcome. Most often the the response will be sent back to the same reviewers who now have to evaluate if the response was adequate. This cycle may repeat several times. Remember that the purpose of the revision is to improve the manuscript. More experimental work may be required, a different analytical tool be employed or data recalculated. This is a real effort! Usually, I scan the reviewer's comments when they are sent to me and try to evaluate if the suggestions are feasible – good news – or if they need to go back to the drawing board. The ladder is rare for us as the scrutiny before submission at IAMT is enormous, but it is always possible to oversee something and it is extremely good when a reviewer is able to pick this up. There is nothing more embarrassing than publishing nonsense without knowing it – and we all make mistakes or oversee problems.
- ◆ **MINOR REVISION:** This is the desired response, even though it often comes with the question if the review was thorough enough. If reviewers are short of time and don't want hassle, the easiest is to wave through, this is indifference. If this is the case, this is the least helpful review one can get and this probably explains why so much flawed work is published.

'The opposite of love is not hate, it's indifference. The opposite of art is not ugliness, it's indifference. The opposite of faith is not heresy, it's indifference. And the opposite of life is not death, it's indifference.'
(Elie Wiesel)

Sometimes I have engaged additional reviewers myself, usually when I was less confident about some aspects of our work, such as a first work with a new model, where it is easy to make mistakes with assumptions or boundary conditions. We then send these comments (not anonymous) with the response and revisions back to the editor and acknowledge the kind colleagues for their efforts. This is better done prior to manuscript submission, so this is an option when I feel that a particular aspect was not covered by the comments we received. A minor revision still needs a response to the reviewers, it is pretty likely now that your manuscript will be accepted assuming you can fix the minor queries. I am sure that our approach of additional reviews is reasonably unique.

- ◆ **MALICIOUS OR BIASED REVIEWS:** Malicious reviews are extremely rare, especially in highly respected journals. They are recognized with derogatory comments that are often very unspecific. ‘This work is substandard’ – without reasons provided. Sweeping comments with one sole purpose, to reject. Again, this could be valid, but manuscripts that warrant such comments should not have been sent for review, but filtered out by the quality check of the editor. Naturally, reviewers get irritated when they are asked to review work that is truly substandard, and I suspect a lot of manuscripts are in this category. ‘Let’s see what the reviewers think’ is not a replacement for senior colleagues going through diligent revisions with their junior authors prior to submission. If the senior author is busy, as most are, then one has to wait (and push). Adding an esteemed ‘honorary’ author is no solution either, besides this being scientific misconduct, but requests are common. It is for the editor to look at reviewer comments and decide if these are credible. We all have colleagues we like or don’t like. I do not accept reviewing the work of colleagues I dislike, for this inevitably causes bias. When the intention is to help improve someone’s work, why would I give my precious time to a colleague who has behaved badly towards me? When I do feel that a manuscript has been rejected unfairly (careful, again our own bias is heavy in such considerations!) then I have on occasion moved up in impact factor for resubmission. This has very often been successful.
- ◆ **DEALING WITH FLAWS:** Flaws can be missing experiments, things that go wrong or quality issues with the data. One can separate flaws into what one can fix and what one cannot fix. For example, if one carried out fieldwork and samples could not be cooled or a sensor failed, resulting in missing data, this cannot be fixed. If an experiment went wrong, or a calibration was off, one can repeat an experiment in the lab. Flaws may also be the validity of models or capabilities of analytical tools. These are serious matters. Extra experimental work is always painful, but it is important to keep samples (it is easier to re-analyse than to repeat experiments) and to analyse results as soon as possible after an experiment. Dealing with flaws honestly and transparently is essential in research. If I am aware of flaws, I spell these out in a publication, naturally one cannot say ‘I did everything wrong, but it was a lot of work and hence this should still be published’. Flaws reduce the quality of the work, if they do not impact the story or the actual research, then the work remains publishable. Examine carefully what the implications are and a reviewer may ask to have this fixed. One example is the ‘I did not measure this, because I do not have the instrument’. Well, it is pretty common in research to collaborate with people who have the tools we need, not every lab can have everything and reaching out is not difficult. Declaring flaws builds trust, hiding flaws – especially when found out - destroys trust more rapidly than one can ever re-build it.
- ◆ **RESPONSE TO REVIEWERS:** Practically, what does a revision look like? Well, at IAMT we have our processes. The comments – with the email of the editor – are pasted into a word document and then each and every comment is answered. This takes a huge effort and a grateful attitude. Grateful that someone very busy has taken the time to thoroughly read our work and provided comments – anonymously and without recognition. While all concerns need to be addressed, one does not need to agree with everything. Opinions differ and if one can argue one’s case then one can explain why certain suggestions are not incorporated. Often reviewers may or may not agree with each other, that is normal. Nevertheless, one ought to be very careful with ‘fobbing off’. Some authors irritate with an incredible arrogance and make it their game of showing that the reviewer obviously did not understand anything, should have just read the work properly and sometimes attack outright. Careful: reputational damage, not to the reviewer, but to the authors. The response letter is usually long. By the time all comments of several thorough reviews are answered a response letter can be as long as a manuscript! A common point of contentment is reviewers suggesting that particular references should be cited, this should be considered. If these references are all from the same group and just not really relevant to the work, one should say this in the response and NOT add citations. Some reviewers may use this for self-disclose, others may try to increase their citations and others may want to cause benefits (or damage) to someone else. There is no need to oblige, but there is a need to be polite and professional.
- ◆ **MANUSCRIPT REVISION:** The intention of the review is to improve the manuscript. Consequently, one needs to modify the manuscript and not just answer the reviewer’s comments. Changes need to be added in the response letter, so the editor and reviewer can judge if the changes were adequate, and in the revised manuscript. As such one should state in the response letter which changes were made and where (see example (Minh Nguyen, 2023)). If a figure revision is requested then it is helpful to show the ‘before’ and ‘after’. This is a lot of effort and takes time, revisions must be approved by all authors. In my team I usually have a quick screen of the comments to see if there is a reason for concern (flaws or

calming the first author), then I ask the first author to prepare the response. Once this first draft is complete, we discuss if additional lab work is required or if any comments need to be rebutted. The revision process should be completed within a two-week period (without lab work).

1. In the introduction section, the authors should highlight the importance of research the force interplay in determining adsorption of micropollutants.

Thank you very much for your comment. Two sentences have been added to the Introduction highlight the importance of research the force interplay in determining adsorption of micropollutants, in lines 133–136, page 6. These sentences read:

“In dynamic adsorption studies, adsorption surface and mass transfer are considered to be the key limiting factors to adsorption.^{4,5} However, the interplay of the forces (F_H , F_F , F_A , and F_R) may play an important role inside the membrane nanopores where both surface and mass transfer are no longer the limiting factors as the nanopore surface is readily accessed by SH molecules.”

- ◆ **DEADLINES:** Typically, deadlines are given by the editor and these may be a standard deadline by a particular journal or reflect the gravity of revisions. Deadlines should be respected as ignoring these may result in the manuscript being withdrawn from the system. If more time is needed, maybe because of additional experiments or authors being on holiday, it is perfectly reasonable to request an extension. It is helpful to highlight in a response letter that an extension has been provided until when – and by whom.
- ◆ **ERRATUM:** Mistakes happen. These may be calculation errors, that even the most experienced author has not picked up when revising the manuscript many times. It may be a wrong dataset being plotted – graphing often requires a lot of data transfer and it is easy to copy and paste the wrong data in the wrong column or leave an old data set. It could be a wrong unit or exponent. This is sloppy, yet it happens to all of us. When such a mistake happens, write this up and send a letter to the editor. The editor will then decide if publishing an erratum is warranted. An erratum admits a mistake, it never looks good, but it demonstrates honesty and builds trust.
- ◆ **RETRACTION:** A manuscript can be retracted on request by the authors or the publisher. This is bad news. Usually, the reasons are severe and may include irreproducible data, fabricated or manipulated data, plagiarism, mistakes that exceed the scope of an erratum, undeclared use of AI and all sorts of misconduct (that would be investigated outside the publication process). It is probably true to say that only a small fraction of manuscripts that contain false or irreproducible data are retracted. Even though it does not feel good, being proactive about retracting a paper demonstrates strength and builds trust.

The publication process can be unfair, sometimes perceived, sometimes real, it is always a combination of effort and luck. When I was appointed full professor and moved continent my publication success rate dropped from near 100% to zero. Often, I joked that the moment I became a professor, I forgot how to publish. It took time to re-establish success and it improved our quality, while the scrutiny did not always increase popularity. I suspect the reasons were a change in geographical region, different expectations of a full professor, rather than a junior who one likes to support and encourage, and possibly maybe a little envy of the early promotion. I have seen team members where every manuscript was a drama – there was no reason for this and certainly there was no correlation with quality or lack thereof (as all passed my rigour), while others were consistently blessed with straightforward publication processes. Some are called for additional resilience training, while others need to face other challenges. As with so many things in life, it is not always fair, but in the end, it all works out. Sometimes I question decisions, and on occasion, I put up an outright fight, but one ought to be careful and not forget the tremendous service editors provide for the community. It is often a thankless task and we ought to appreciate the contributions. A PhD student once accused me that I had obviously spoken to the reviewer, as the reviewer had made the same comment about her work as I had prior to submission. No, the senior author is not in touch with the reviewers either, it is an anonymous review process. Senior authors accumulate experience with both publishing and reviewing and can often foresee what a good reviewer will ask. This is an additional reason to respect and follow the comments of the senior authors, like them or not. Incorporating comments is not optional, yet if one disagrees then this should be discussed with courage, as all authors share the responsibility of the work.

References

1. Coping with peer rejection, Nature, 16 October 2003, Volume 425, Issue no 6959.
2. Working Scientist podcast: How to bounce back from a bruising peer-review or paper rejection, <https://www.nature.com/articles/d41586-020-00381-1> (accessed 10/12/2024)
3. Peer review: the nuts and bolts, <https://senseaboutscience.org/wp-content/uploads/2016/09/peer-review-the-nuts-and-bolts.pdf> (accessed 10/12/2024)
4. Nature Collection, <https://www.nature.com/collections/prbfkwmwvz> (accessed 10/12/2024)